

PH	US 00014920	MAT. DOSSIER
----	----------------	-----------------

(12) UK Patent Application (19) GB (11) 2 240 233 (13) A

(19) GB

(11) 2 240 233 (13) A

(43) Date of A publication 24.07.1991

(21) Application No 9016139.9

(22) Date of filing 23.07.1990

(30) Priority data
(31) 9001266 (32) 19.01.1990 (33) GE

(51) INT CL⁵
H04N 7/18

(52) UK CL (Edition K)
H4F FAA FD24 FD32
U1S S2186

(56) Documents cited
None

(58) Field of search
UK CL (Edition K) H4F FAA
INT CL⁶ H04N
Online databases : WPI, INSPEC

(7) Applicant

**Brian David Hurst
Clearwater, 30A Arthog Road, Hale, Cheshire,
WA15 0LX, United Kingdom**

(72) Inventor

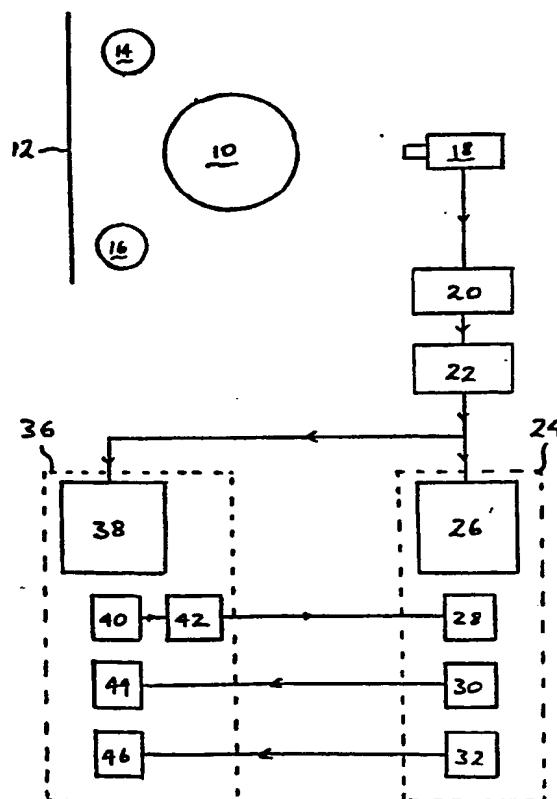
Brian David Hurst

(74) Agent and/or Address for Service

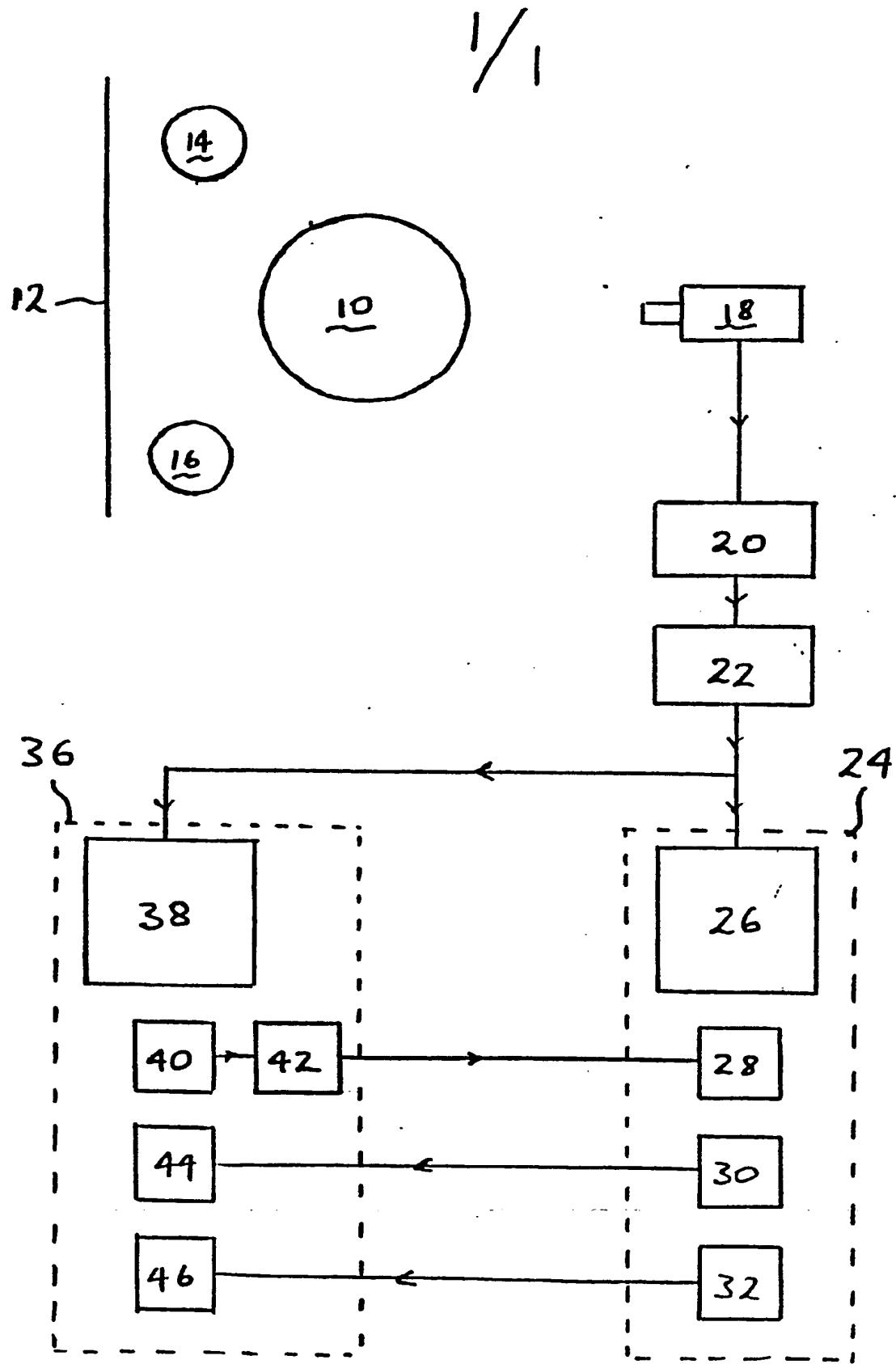
Newburn Ellis
2 Cursitor Street, London, EC4A 1BQ, United Kingdom

(54) Interactive marketing apparatus including concealed television surveillance

(57) An interactive marketing apparatus includes an animated figure 10 positioned to be displayed on a monitor 26 via a first video camera 18. The monitor 26 is located at a point of display 24 and is associated with a loudspeaker 28, a first microphone 30 and a second video camera 32. An operator (not shown) is provided with means to control movement of the figure 10 (not shown) and a second monitor 46 to show the image recorded by the second video camera of customers' reactions to the image on the first monitor 26. A second microphone 40 transmits the operator's voice to the loudspeaker 28 and the operator's earphones 44 enable him to hear any verbal response by the audience. A third monitor 38 may be included to permit the operator to monitor the image viewed by the point of display audience.



GB 2240 233 A



INTERACTIVE MARKETING APPARATUS

This invention relates to interactive marketing apparatus, especially such apparatus using an animated figure or character presented on a television screen or monitor.

Interactive marketing devices are already known especially those utilising a computer generated figure or image as a major element. However, such computer generated images are costly to maintain for a long time period and relatively complex although limited in the range of their possible responses. Thus, spontaneity is limited and it is difficult to vary the responses provided according to the particular situation required.

Interactive marketing devices are advantageous in certain circumstances in that comments or responses made by an imaginary figure or character can be more direct and pointed than could be made by a live person in similar circumstances. Furthermore, there are wide possibilities for the use of an interactive display in those areas of the service industry which would otherwise have difficulty in mounting promotional exercises in order to attract customers.

It would be advantageous if an interactive marketing device could be provided which was simple in construction yet capable of a wide range of responses to customer input.

With this object in view the present invention provides interactive marketing apparatus comprising an animated figure, a video camera positioned so as to provide an image of the figure for a first monitor positioned at the point of display, the first monitor being provided with a loudspeaker and associated with a second video camera and a first microphone both positioned so as to be concealed from customers at the point of display, a second microphone connected to the loudspeaker, sound reproduction means connected to the first concealed microphone and a second monitor connected to the concealed camera.

It will be appreciated that the second monitor, microphone, and sound reproduction means form a central control point for operation of the animated figure by a designated operator. The second microphone is preferably connected to the first loudspeaker by way of a synthesizer such that the operator's voice will be suitably disguised. The apparatus advantageously further includes a third monitor, associated with the second monitor, sound reproduction means and second

microphone, which is connected to the first video camera so as to display the image of the figure to the operator.

Responses by persons at the point of display will be received by the concealed microphone and relayed by the sound reproduction means, preferably headphones to the operator. The concealed video camera also serves to provide further information via the second monitor to the operator such that the response of the animated figure and via the loudspeaker may be suitably moderated. The concealed camera is preferably movable in response to an operator command and is provided with picture magnification or telephoto lens capabilities.

The animated figure is preferably provided against a backdrop which may consist of one or more further animated figures.

The first animated figure is preferably controlled directly by the system operator such that its movement correspond to the responses required and provided by the operator.

In order to simplify the operational control of the apparatus any further animated figures are preferably automatically controlled thus leaving the

system's operator free to concentrate on controlling the first animated figure and providing the necessary responses via the second microphone.

In a preferred embodiment of the invention the first animated figure is provided against a backdrop including two further animated figures which are moved in response to a music track or similar automatic control system.

It will be appreciated that it is possible to substitute a computer generated figure for either the first animated figure or any further "background" figures. However, such substitution will considerably increase the complexity of the system without increasing the possibility for flexible response.

In order to increase the possibilities for presentation of information it is preferable to provide the first monitor with split screen facilities such that information may be presented on the first monitor in addition to the image of the animated figures. The use of video playback techniques such as overlay or picture-in-picture enhance the overall presentation.

With the system according to an aspect of the invention it is possible for the point of display

apparatus, first monitor, speaker, microphone and concealed camera to be placed at one position within premises, the animated figure, background and video camera to be disposed elsewhere and the control apparatus, second monitor, microphone, sound reproduction means and third monitor to be placed elsewhere within the building along with its operator.

The figures used in the system may be of any convenient design or character, for example, a caricature of a person associated with the goods or services to be promoted. Alternatively, an imaginary figure may be constructed using elements of the related goods or services such as a burger for a restaurant, a tooth for a dentists etc. Each figure is preferably constructed of a flexible material such as rubber or latex or alternatively is provided with moving parts so as to permit its animation.

The invention will now be described further by way of example with reference to the accompanying drawing in which the single figure is a block diagram representing a first preferred embodiment of the invention.

As shown in the accompanying drawing a preferred embodiment of the interactive marketing apparatus

comprises an operator controlled animated figure 10. This figure may be of any desired configuration and is preferably appropriate to the goods being displayed or sold and to the personality which is required for the particular figure. Preferably the animated figure is such that its movement, or at least those of its mouth and head, may be controlled so as to give the illusion that the figure itself is speaking in accordance with the words provided by its operator. Thus the figure could be constructed of a flexible material such as rubber or latex or be provided with a plurality of moving parts. Examples of appropriate figures include caricatures of persons associated with the goods or services or imaginary figures constructed of or associated with elements of the goods or services such as a beefburger, a tooth, a car, a pair of spectacles etc.

In the preferred embodiment the animated figure 10 is disposed to stand in front of a background 12 which may contain advertising material, for example, the name of the service or company being promoted along with any scenic requirements. Second and third animated figures 14, 16 may also be provided to give further interest to the background 12. These two figures 14, 16 are not controlled by an operator but are moved automatically in response to a control signal, for

example, a music track or an audible cue generated by the system's operator.

A video camera 18 is disposed so that the first animated figure 10, the background 12, the second and third animated figures 14, 16 are all within its field of view. The image generated by the video camera 18 is passed to a video recorder 20 which thus enables the sequence to be recorded if so desired. The video recorder 20 is linked to a booster unit 22 after which the image signal is split into two channels, the first of which is provided to a first group of apparatus 24 located at a point of display.

This first group of apparatus 24 comprises a first monitor 26 operative to receive the signal from the booster 22 and display it for the benefit of customers or other viewers. A first loudspeaker arrangement 28 is also provided adjacent to the monitor operative to relay the system operator's voice to the said assembled customers. The first group of apparatus 24 also includes a concealed microphone 30 and a concealed video camera 32. Both the microphone and the video camera are operative to relay visual and audio signals of the consumer to the system's operator and are concealed so that the consumers are not easily aware of their presence. In this way the illusion that the

figure on the monitor is seeing and hearing the consumer's response is maintained. The video camera 32 may be mounted movably so that its angle of vision may be changed by a system operator. Additionally, a telephoto lens or '200m' facility may be provided to increase the information which is picked up by the camera.

In the preferred embodiment the apparatus also comprises a second control group of devices 36 which are for the use and information of the system's operator. This second group 36 receives signals from the first video camera 18 via the second channel and the booster unit 22. The second group comprises a third monitor 38, a second microphone 40 connected to a synthesizer 42 and thence to the first speaker 28. A headphone set 44 to be worn by the system's operator, is connected to first microphone 30 and a second monitor 46 connected to the concealed video camera 32. A second loudspeaker may be used in place of the headphone set 44. However, problems may arise if sound produced by the speaker is picked up by the second microphone 40 and thence by the first loudspeaker 28.

It will thus be appreciated that the system's operator can not only see the image which he himself is producing to the consumers at the point of display but

can also see and hear their reactions and through the microphone can provide appropriate responses for the character on the screen. The synthesizer 42 disguises the operator's voice and is selected so that the voice heard from the first loudspeaker 28 fits the character of the animated figure 10.

The invention is not confined to the foregoing details and variations are possible. For example, a computer generated figure may be substituted for either the first animated figure 10 or the second or third animated figures 14, 16. However, such substitution will considerably increase the complexity of the operation and reduce the flexibility in operator generated response. Alternatively the second and third figures 14, 16 may be entirely omitted. The voice synthesizer 42 is not necessary and can be omitted if desired. Similarly the second monitor 38 could also be omitted if the system operator is in a position to directly view the animated figure 10 and associated background 12. In such an arrangement the operator does not need to see the image which is visible to the customers at the point of display. Other variations are also possible.

CLAIMS

1. Interactive marketing apparatus comprising an animated figure, a video camera positioned so as to provide an image of the figure for a first monitor positioned at the point of display, the first monitor being provided with a loudspeaker and associated with a second video camera and a first microphone, both positioned so as to be concealed from customers at the point of display, a second microphone connected to the loudspeaker, sound reproduction means connected to the first concealed microphone and a second monitor connected to the concealed camera.
2. Apparatus as claimed in claim 1 in which the second microphone is connected to the loudspeaker by way of a synthesizer effective to disguise an operator's voice.
3. Apparatus as claimed in claim 1 or claim 2 in which the first video camera also provides an image for a third monitor associated with the second monitor, sound reproduction means and second microphone.
4. Apparatus as claimed in claims 1, 2 or 3 in which the animated figure is provided with a backdrop which consists of one or more further animated figures.

5. Apparatus as claimed in any preceding claim in which the or each animated figure is provided with control means operable by an operator such that the or each figure's movement corresponds to the verbal responses provided by the operator.
6. Apparatus as claimed in claim 4 in which movement of the further animated figures is automatic according to preprogrammed instructions.

7. Apparatus substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

THIS PAGE BLANK (USPTO)